

ABSTRACT

A high temperature resistant coating composition comprising mainly a silicone resin, an epoxy resin, an amidoamine curing agent, and a mixture of three fillers: titanium dioxide, aluminum flake, and micaceous iron oxide. The silicone resin based composition can resist
5 greater than 500°C temperature for long term uses and can protect a kiln or industrial facilities such as a cement or power plant from corrosions, including undercut corrosions, and chemical attacks, particularly sodium hydroxide. The coating can gel at ambient temperature to render it tack free for easy handling and inspection. The composition disclosed herein has improved coating properties and can be baked at elevated temperatures
10 without sagging or run-off on a vertical surface. Optionally, additional fillers, a catalyst, an additive, and an organic solvent can be added to the composition.